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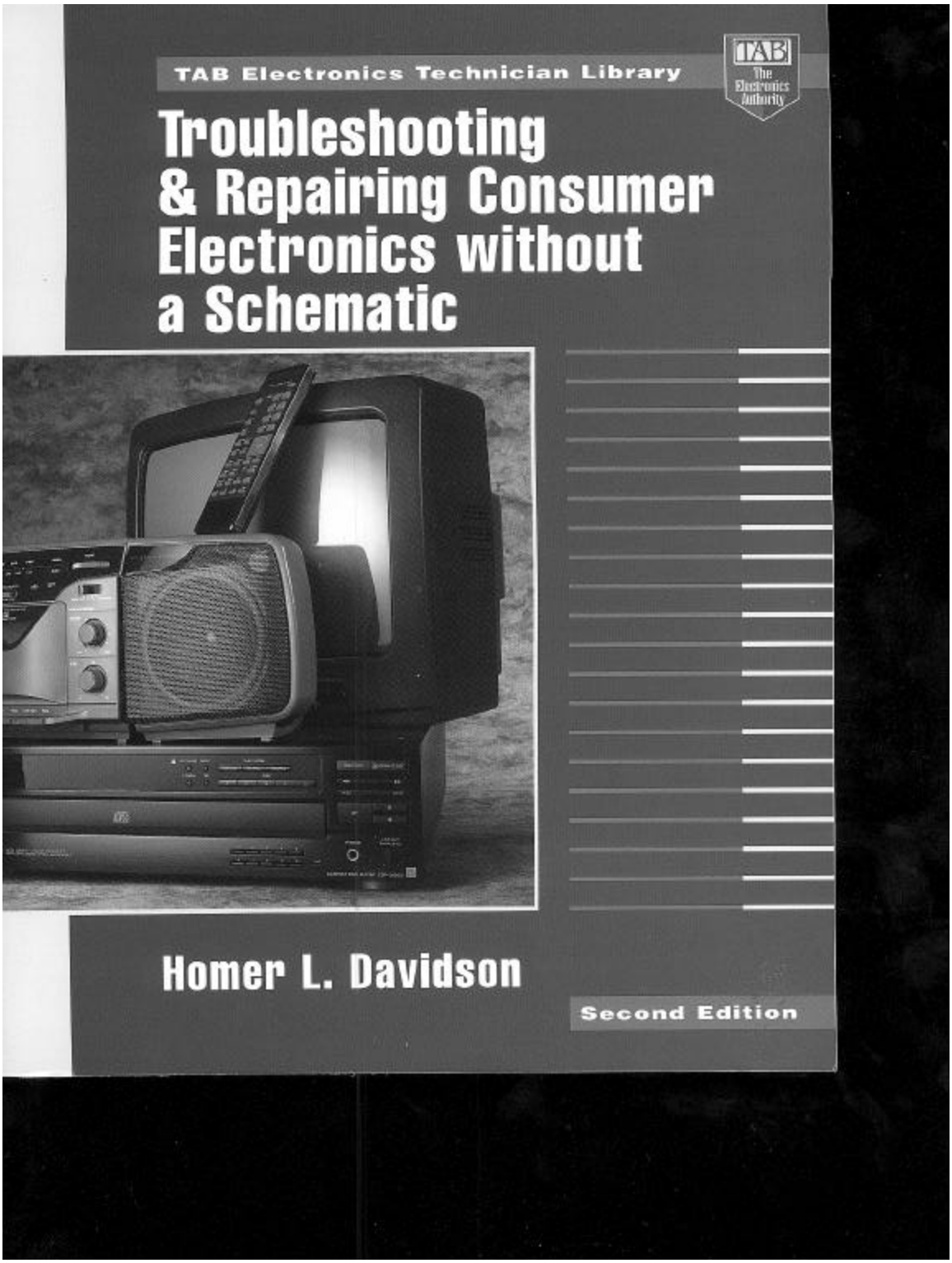
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Troubleshooting & Repairing Consumer Electronics without a Schematic
Homer L. Davidson
Second Edition

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Electronics

One of the most trusted names in consumer electronics helps you solve one of its most nagging problems

In this thoroughly updated new edition of his best-selling guide, Homer Davidson, one of the most respected and prolific authors in the field of consumer electronics, provides experienced, hands-on information and advice on how to troubleshoot and repair a wide range of electronic units--when you don't have the benefit of schematic diagrams.

Davidson, who actually ran his own successful radio and TV repair business for more than 40 years, shows you how to diagnose and solve the circuit problems that commonly occur in audio amps, auto receivers, TV chassis, cassette decks, CD players, AM/FM receivers, VCRs, car radios, stereos, boom-boxes, and more.

Included are more than 400 detailed drawings and photographs that illustrate the most efficient methods for locating, testing, and repairing defective components. In addition, Davidson offers:

- A list of typical mechanical problems that can crop up in each type of electronic unit
- A corresponding chart that points out where to check for those problems in a given unit
- An abundance of all-new case histories that demonstrate how repairs have actually been made
- Instruction on how to tackle "tough dog" problems

Indispensable to today's professional electronic repair technicians, this goldmine of practical guidance will also prove highly useful to electronic engineers, sophisticated hobbyists, and advanced students of electronics.

ABOUT THE AUTHOR

Homer L. Davidson has written more than 35 books and more than 1,000 articles in the field of technician-level electronics troubleshooting and repair. His highly popular books include *Troubleshooting and Repairing Audio Equipment*. Third Edition, *Troubleshooting and Repairing Compact Disc Players*, Third Edition, *Troubleshooting and Repairing Camcorders, Second Edition*, and *Troubleshooting and Repairing Solid-State TVs*, Third Edition. He is currently the TV Servicing Consultant for *Electronic Servicing & Technology magazine*.

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Introduction

The need to troubleshoot and repair consumer electronics without a schematic occurs every day in the life of a busy electronics technician. The technician who repairs all types of electronic equipment must make quick and practical repairs; otherwise, he or she will be out of the business within a few years. It is difficult to have every schematic of the electronic product that appears upon the service bench. Remember, these technicians turn out hundreds of electronic repairs each week, month after month, without a schematic.

Even the largest and best-equipped establishment cannot have all the schematics required to service every piece of equipment that crosses the service bench. The more experienced and better informed the electronics technician is, the more productive in troubleshooting and repairing consumer electronics he or she will be. This book will help the beginning, intermediate, and experienced electronic technician service and repair different types of consumer electronics without a schematic. Besides servicing tips and valuable information, practical case histories are found throughout the book.

The purpose of this book is to provide practical service experience and methods for servicing electronic equipment without a schematic. Of course, repairing certain types of electronic products cannot be accomplished unless a certain schematic is available. There are many repairs you can make without a circuit diagram. The tough dog and intermittent service problem are difficult to find without a schematic.

Most repair centers afford every schematic on consumer equipment. Others simply to do not have room for them. In addition, some schematics for import models are difficult to obtain. It might take weeks or months to get them, and the electronic product sits for days, in pieces, until the diagram arrives. Sometimes the schematic never comes; they are no longer available.

Troubleshooting and Repairing Consumer Electronics Without a Schematic begins with servicing methods. Chapter 2 shows you how to locate, test, and repair the electronic product. Repairing audio amps, large and small, are given in Chapter 3, with the list of required test equipment, symptoms, and methods of servicing these amplifiers. Chapter 4 is on servicing the auto or car radio receivers. Trou

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bleshooting the cassette player is found in Chapter 5, with the various symptoms, tips, and actual case histories.

In Chapter 6, you will learn how to repair the black-and-white TV chassis. Chapter 7 shows you how to service the compact disc player, found in the boom box, table-top, auto, and CD changer. Troubleshooting the color TV chassis is found in Chapter 8 with the many different circuits and troubleshooting tips. Repairing power supplies is covered in Chapter 9, which covers all power sources found in the many electronic components. Chapter 10, on servicing stereo sound circuits, covers most stereo audio circuits located in the many electronic products within the consumer electronic field.

Troubleshooting AM/FM/MPX circuits is located in Chapter 11. How to service VCR mechanical and electronic problems is covered in Chapter 12, which provides various symptoms, VCR problems, and actual case histories. Chapter 13 shows you how to test the remote control and the infrared receiver circuits. The many service problems within the boom-box cassette and CD player are given in Chapter 14. Last but not least, 20 tough-dog symptoms and repairs are found in the Chapter 15.

Of course, in a book this size, it is impossible to show how to repair every type and model of consumer electronic products. However, information on how to troubleshoot and repair audio amplifiers, auto receivers, cassette players, black-and-white TVs, compact disc players, color TV chassis, stero units, AM/FM/MPX circuits, and VCRs is found throughout the various chapters, without schematics.

Don't push that electronic unit aside and wait for the correct schematic. Apply the methods within this book to turn out more repairs and fill up that cash register. Electronic products collecting dust provide no income. Troubleshooting and repairing consumer electronics can be fun and quite rewarding, even when the schematic is not available.

Homer L. Davidson

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